Letter of Understanding (LOU) between the **GLAST Science Support Center (GSSC)** and the **National Space Science Data Center (NSSDC)**

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1. Introduction

This is a Letter of Understanding (LOU) between the National Space Science Data Center (NSSDC) and the GLAST Science Support Center (GSSC) at the NASA Goddard Space Flight Center (GSFC). It documents the roles of those organizations in the acquisition, management, dissemination and preservation of GLAST Level 0 data; higher level data are maintained and archived by the High Energy Astrophysics Science Archive Research Center (HEASARC), which has an independent agreement with the NSSDC. This LOU may be amended as a result of further agreements between the NSSDC and the GSSC.

GLAST Level 0 data will consist of 'cleaned-up' telemetry: the telemetry packets are time ordered; repeated packets are removed; and corrupted packets are flagged. Both housekeeping and scientific data are included in the Level 0 data.

This LOU will be reviewed by the NSSDC and the GSSC as needed, and by their advisory groups as they desire. In particular, this LOU will be reviewed before the end of the GLAST mission to plan for the post-mission archiving of the Level 0 data. Inconsistencies between current practices and LOU statements, or future modifications to this LOU, will be addressed and resolved/agreed by the Director of NSSDC, the GSSC manager, and the relevant SMD program executives when needed.

The NSSDC was created in 1966 as NASA's only archive for space and Earth science data. The NSSDC's data management role has evolved with the emergence of a series of active archives in both space and Earth science. Presently it has permanent archiving responsibility for NASA space science mission data. It has active archiving responsibilities in certain space science discipline areas. It has additional roles not germane to this LOU. The NSSDC home page is at http://nssdc.gsfc.nasa.gov/.

The GLAST Science Support Center (GSSC) at NASA's Goddard Space Flight Center (GSFC) supports participation in the GLAST observation program by the general astronomical community for all phases of the mission in a form consistent with other high energy astrophysics missions. A fundamental role of the GSSC is to oversee the creation of the GLAST archive.

2. The Responsibilities of the GSSC and the NSSDC

RESPONSIBILITIES: GSSC

- The GSSC shall transfer the Level 0 data to the NSSDC every 3 months starting 3 months after the activation of GLAST's instruments.
- The initial Backup Level of service is requested.
- The GSSC shall transfer these data on SDLT tapes provided by the GSSC. The current estimate of the data volume is 2 TB/yr, with a possible range of 0.5-8. TB/yr.
- The GSSC shall maintain a catalog of the holdings at the NSSDC.
- The GSSC shall request the return of these tapes, as needed.
- The GSSC shall provide the NSSDC with annual estimates of the data volume.
- The GSSC shall negotiate with the NSSDC any amendments to this LOU, as needed.
- No later than one year before the anticipated end of the GLAST mission, the GSSC shall negotiate with the NSSDC the post-mission archiving and distribution of these data.

RESPONSIBILITIES: NSSDC

- The NSSDC shall receive SDLT tapes from the GSSC every 3 months starting 3 months after the activation of GLAST's instruments.
- The NSSDC shall maintain these tapes as a 'Backup.' Unless this LOU is amended, these data tapes will not be transformed into Archival Information Packets (AIPs). In addition, the NSSDC is not responsible for a migration plan from legacy media, or for the implementation of such a plan.
- The NSSDC will not be required to distribute data.
- The NSSDC shall return these tapes to the GSSC if requested during the life of the GLAST mission.
- The NSSDC shall negotiate with the GSSC any amendments to this LOU, as needed.
- No later than one year before the anticipated end of the GLAST mission, the GSSC shall negotiate with the NSSDC the post-mission archiving and distribution of these data.